

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. – 17. (Canceled)

18. (Currently Amended) A method of inhibiting neovascularization in a subject in need thereof comprising:

administering to said subject, for a time and under conditions effective to inhibit neovascularization, a pharmaceutical preparation comprising a pharmaceutically acceptable carrier and an amount of a compound effective to inhibit neovascularization with the formula of R'-Glu-Trp-R'', or pharmaceutically acceptable salts thereof,

wherein R' and/or R'' is absent or

wherein R' represents an alkyl group, an aryl group, an ester, an ether, an anhydride, or mixed alkyl/aryl derivative,

or R', taken together with the alpha-amino group of glutamic acid, represents an amide, or an imide,

R'' represents an alkyl group, an ether, an aryl group, or mixed alkyl/aryl derivative,

or R'', taken together with the carbonyl group of tryptophan represents an imide, an ester, or an anhydride,

wherein R' can also represent an amide bond between the amine of said Glu and the side chain carboxylate of said Glu,

wherein neither R' nor R'' contains amino acids,

~~wherein both R', taken together with the alpha-amino group of glutamic acid, and R'', taken together with the carbonyl group of tryptophan, are not both amide,~~
and

wherein the formula weight of said compound is less than 5000 Daltons.

19. (Previously Presented) The method of claim 18, wherein the formula weight of said compound is less than 1000 Daltons.

20. (Previously Presented) The method of claim 18, wherein said compound is selected from the group consisting of:

Ac-Glu-Trp, Suc-Glu-Trp, Cpr-Glu-Trp, But-Glu-Trp, and pyroGlu-Trp wherein Ac represents acetyl, Suc represents succinyl, Cpr represents cyclopropyl and But represents butyryl.

21. (Previously Presented) The method of claim 18, wherein said pharmaceutically acceptable salt is selected from the group consisting of sodium, potassium, ammonium, zinc, magnesium, and calcium.

22. (Currently Amended) The method of claim 18, wherein said pharmaceutically acceptable salt is selected from the group consisting of hydrochloride, hydrobromide, sulfate, bisulfate, acetate, oxalate, valarate, oleate, laurate, borate, benzoate, lactate, phosphate, tosylate ~~tosulate~~, citrate, maleate, fumarate, succinate, and tartrate.

23. (Previously Presented) The method of claim 18, wherein the subject is afflicted with hemangioma.

24. (Previously Presented) The method of claim 18, wherein the subject is afflicted with a vascularized malignant tumor or vascularized benign tumor.

25. (Original) The method of claim 24, wherein the tumor is a tumor of the meninges, an intracerebral tumor, a sarcoma, an osteosarcoma, a tumor of the esophagus, or a tumor of the trachea.

26. (Original) The method of claim 24, wherein the tumor is a lewis carcinoma.

27. (Original) The method of claim 24, wherein the tumor is Kaposi's sarcoma.

28. (Previously Presented) The method of claim 18, comprising administering to the subject a dose of said compound of about 0.5 μ g per 1 kilogram body weight to about 1 mg per 1 kg body weight.

29. (Previously Presented) The method of claim 28, wherein the effective amount is about 1 μ g/kg to about 50 μ g/kg body weight.

30. (Previously Presented) The method of claim 28, wherein said dose is administered daily over a period of 1 day to about 30 days.

31. (Previously Presented) The method of claim 18, wherein said pharmaceutical preparation is administered intramuscularly, intranasally, transdermally, or intrabronchially.

32. (Previously Presented) The method of claim 18, wherein said pharmaceutical preparation is administered intravenously, intraperitoneally, subcutaneously, or gastrointestinally.

33. (Previously Presented) The method of claim 18, wherein said pharmaceutical preparation is an injectable solution comprising 0.001% to 0.01% of said compound.

34. (Previously Presented) The method of claim 18, wherein said pharmaceutical preparation is in a unit dose form comprising a tablet, a suppository, a capsule, an eye film, an inhalant, a mucosal spray, a nose drop, an eye drop, a toothpaste, an ointment, a water-soluble based cream, a solution, or a saline solution.

35. (Previously Presented) The method of claim 34, wherein said unit dose form consists essentially of 0.01 mg of said compound.

36. – 38. (Canceled)

39. (Previously Presented) The method of claim 18, wherein the subject is not immune compromised.

40. (Previously Presented) The method of claim 18, wherein the subject is afflicted with neovascularization in post-recovery cerebrovascular accident, neovascularization due to head trauma, restenosis following angioplasty, or neovascularization due to heat or cold trauma.

41. (Previously Presented) The method of claim 18, wherein the subject is afflicted with neovascularization associated with substance-induced neovascularization of the liver, angiogenic dysfunction related to an excess of hormone, neovascular sequelae of diabetes, neovascular sequelae to hypertension, or chronic liver infection.

42. (Original) The method of claim 41, wherein the neovascular sequelae of diabetes is central serous chorioretinopathy.

43. (Previously Presented) The method of claim 18, wherein the ester is a methyl, ethyl, or other alkyl ester.

44. (Canceled)

45. (Previously Presented) The method of claim 18, wherein said composition consists essentially of L-Glu-L-Trp.

46. (Canceled)

47. (Previously Presented) The method of claim 18, wherein the formula weight of said compound is about 1000 Daltons.

48. (Previously Presented) A method of inhibiting neovascularization in a subject in need thereof comprising:

administering to said subject, for a time and under conditions effective to inhibit neovascularization, a pharmaceutical preparation comprising a pharmaceutically acceptable carrier and an amount of a compound effective to inhibit neovascularization with the formula of R'-Glu-Trp-R'', or pharmaceutically acceptable salts thereof,

wherein R' and/or R'' is absent or

wherein R' represents an alkyl group, an aryl group, an ester, an ether, an anhydride, or mixed alkyl/aryl derivative,

or R', taken together with the alpha-amino group of glutamic acid, represents an amide, or an imide,

R'' represents an alkyl group, an ether, an aryl group, or mixed alkyl/aryl derivative,

or R'', taken together with the carbonyl group of tryptophan represents an amide, an imide, an ester, or an anhydride,

wherein R' can also represent an amide bond between the amine of said Glu and the side chain carboxylate of said Glu,

wherein both R', taken together with the alpha-amino group of glutamic acid, and R'', taken together with the carbonyl group of tryptophan, are not both amide, and

wherein the formula weight of said compound is less than 1000 Daltons.

49. (Previously Presented) The method of claim 48, wherein said pharmaceutically acceptable salt is selected from the group consisting of sodium, potassium, ammonium, zinc, magnesium, and calcium.

50. (Previously Presented) The method of claim 48, wherein said pharmaceutically acceptable salt is selected from the group consisting of hydrochloride, hydrobromide, sulfate, bisulfate, acetate, oxalate, valerate, oleate, laurate, borate, benzoate, lactate, phosphate, tosylate, citrate, maleate, fumarate, succinate, and tartrate.

51. (Previously Presented) The method of claim 48, wherein the subject is afflicted with hemangioma.

52. (Previously Presented) The method of claim 48, wherein the subject is afflicted with a vascularized malignant tumor or vascularized benign tumor.

53. (Previously Presented) The method of claim 52, wherein the tumor is a tumor of the meninges, an intracerebral tumor, a sarcoma, an osteosarcoma, a tumor of the esophagus, or a tumor of the trachea.

54. (Previously Presented) The method of claim 52, wherein the tumor is a Lewis carcinoma.

55. (Previously Presented) The method of claim 52, wherein the tumor is Kaposi's sarcoma.

56. (Previously Presented) The method of claim 48, comprising administering to the subject a dose of said compound of about 0.5 μg per 1 kilogram body weight to about 1 mg per 1 kg body weight.

57. (Previously Presented) The method of claim 56, wherein the effective amount is about 1 $\mu\text{g/kg}$ to about 50 $\mu\text{g/kg}$ body weight.

58. (Previously Presented) The method of claim 56, wherein said dose is administered daily over a period of 1 day to about 30 days.

59. (Previously Presented) The method of claim 48, wherein said pharmaceutical preparation is administered intramuscularly, intranasally, transdermally, or intrabronchially.

60. (Previously Presented) The method of claim 48, wherein said pharmaceutical preparation is administered intravenously, intraperitoneally, subcutaneously, or gastrointestinally.

61. (Previously Presented) The method of claim 48, wherein said pharmaceutical preparation is an injectable solution comprising 0.001% to 0.01% of said compound.

62. (Previously Presented) The method of claim 48, wherein said pharmaceutical preparation is in a unit dose form comprising a tablet, a suppository, a capsule, an eye film, an inhalant, a mucosal spray, a nose drop, an eye drop, a toothpaste, an ointment, a water-soluble based cream, a solution, or a saline solution.

63. (Previously Presented) The method of claim 62, wherein said unit dose form consists essentially of 0.01 mg of said compound.

64. – 66. (Canceled)

67. (Previously Presented) The method of claim 48, wherein the subject is not immune compromised.

68. (Previously Presented) The method of claim 48, wherein the subject is afflicted with neovascularization in post-recovery cerebrovascular accident, neovascularization due to head trauma, restenosis following angioplasty, or neovascularization due to heat or cold trauma.

69. (Previously Presented) The method of claim 48, wherein the subject is afflicted with neovascularization associated with substance-induced neovascularization of the liver, angiogenic dysfunction related to an excess of hormone, neovascular sequelae of diabetes, neovascular sequelae to hypertension, or chronic liver infection.

70. (Previously Presented) The method of claim 69, wherein the neovascular sequelae of diabetes is central serious chorioretinopathy.

71. (Previously Presented) The method of claim 48, wherein the ester is a methyl, ethyl, or other alkyl ester.

72. (Canceled)

73. (New) A method of inhibiting neovascularization in a subject in need thereof comprising:

administering to said subject, for a time and under conditions effective to inhibit neovascularization, a pharmaceutical preparation comprising a pharmaceutically acceptable carrier and an amount of a compound effective to inhibit neovascularization with the formula of R'-Glu-Trp-R'', or pharmaceutically acceptable salts thereof,

wherein R' and/or R'' is absent or

wherein R' represents an alkyl group, an aryl group, an ester, an ether, an anhydride, or mixed alkyl/aryl derivative,

or R', taken together with the alpha-amino group of glutamic acid, represents an amide, or an imide,

R'' represents an alkyl group, an ether, an aryl group, or mixed alkyl/aryl derivative,

or R'', taken together with the carbonyl group of tryptophan represents an amide, an imide, an ester, or an anhydride,

wherein R' can also represent an amide bond between the amine of said Glu and the side chain carboxylate of said Glu,

wherein both R', taken together with the alpha-amino group of glutamic acid, and R'', taken together with the carbonyl group of tryptophan, are not both amide,

wherein neither R' nor R'' contains amino acids, and

wherein the formula weight of said compound is about 1000 Daltons.